# Project Title: Town of Cathlamet Groundwater Source Development

[If your Watershed Plan Implementation and Flow Achievement Request is related to or part of a Operational Project Funding Request for 2009-11 please cross-reference the name of that project in parenthesis above]

County: Wahkiakum County

**WRIA: 25** 

If more space is needed attach additional sheets

Phone no.	Fax no.
(360) 795-8032	(360) 795-8500
State	Zip code
WA	98612
Phone Number	Fax Number
( )	
State	Zip code
-	(360) 795-8032    State   WA     Phone Number   ( )

# 2. Project Location

# Project name

Town of Cathlamet Groundwater Source Development

# **Project location**

Near the Town's Intake and Water Treatment Plant on the Elochoman River. These are located at 451 Elochoman Valley Road.

# Stream reach mile or location

The Town's existing intake and Water Treatment Plant is located at approximately River Mile 4.2 on the Elochoman River. A new well source would be located in the vicinity of the existing intake and Water Treatment Plant.

3. Project Type and Description	
(Check all that apply)	
Conservation and/or infrastructure improvement (pumps and pipes)	
Water storage feasibility study	
Water exchange or water right acquisition	

# Please describe your project in detail:

The proposed project would begin development of an additional groundwater source to augment or replace the Town of Cathlamet's existing surface water source on the Elochoman River.

Currently, the Town of Cathlamet obtains all of its potable water from an infiltration gallery intake on the Elochoman River. The Town has water rights for withdrawal of up to 821 gpm (1.83 cfs) and 633.8 acre-feet from this source. The Town's current pumping facilities allow it to withdraw up to 600 gpm from the Elochoman River. The Town's existing Water Treatment Plant can treat up 700 gpm.

The Town would like to develop groundwater source of supply to reduce its reliance of surface water from the Elochoman River. A groundwater supply would likely have less impact on stream flows in the Elochoman River, allowing more water to be left in the river for habitat and recreational uses. A groundwater water supply would also improve the Town's ability to supply water in winter months when the Elochoman River is highly turbid due to storm events.

The proposed project to be funded as part of this grant would consist of completing a hydrogeologic evaluation of the area to determine the potential for developing a groundwater source in the vicinity of the Town's existing water treatment facility and drilling a well to determine available water quantity and quality.

Assuming that drilling the well provides a satisfactory water quality and quantity, the Town would move forward on a future project of developing and equipping the well, including completing any necessary water right transfer or acquisition.

# Use this box to make any other comments regarding the project and water rights involved:

The proposed project would implement many of the recommendations of the WRIA 25/26 Watershed Management Plan. Section 3.3.2 of the Plan states that:

"For cases in which existing municipal supplies (as contrasted with planned future supplies) have the potential to negatively impact flows in critical stream reaches, the Planning Unit recommends that the selected communities undertake a review of alternative sources of supply, similar to that described in Section 3.3.1. It is recommended that, where feasible, these water suppliers cease or limit the use of certain existing supplies and develop alternative sources of supply that are less likely to impact flows in critical stream reaches. It is also recommended that implementation of such alternatives be eligible for funding from regional, state, or federal funding programs."

The above recommendation is mirrored in policy statement SFP-5 (from the watershed plan) which advises:

"Communities using water sources (surface or ground water) that significantly reduce base flows in any stream that provides important fish habitat within WRIAs 25 and 26 should evaluate alternative sources of supply that eliminate or minimize these effects. It is anticipated that this would require examination of cost, potential rate impacts, reliability considerations, and evaluation of other feasibility criteria."

Consistent with the provisions of policy statement SFP-4 (from the watershed plan), establishment of an alternative source of supply would allow the Town to "...adopt policies and procedures in advance, to

allow for quickly altering operations to minimize or eliminate the depletion of stream flow to the extent feasible in the event such a drought occurs." Provision of a groundwater source would allow the Town to shift a portion of its production demands from it surface water source to the groundwater source during periods of low in-stream flow occurring during the summer months.

The WRIA 25/26 Watershed Plan also contains a second volume titled WRIA 25/26 Detailed Implementation Plan (DIP). In this document, actions are outlined that will satisfy the policies set forth in the Watershed Plan. Action #910 in this document describes planning studies to explore alternative sources of supply to augment or replace the existing source while Action #910D describes a study to be undertaken to determine the feasibility of replacing the Town of Cathlamet's Elochoman River water supply.

Furthermore, the Elochoman River has been identified by the Watershed Plan as a high priority for implementation of actions to improve in-stream flows (pg. 4-34). The Lower Columbia Salmon Recovery 6-Year Habitat Work Schedule and Lead Entity Habitat Strategy further supports alternative source development by placing protection of in-stream flows as one of the highest priority measures for the Elochoman River. The Elochomon river is home to four species of Endangered Species Act listed salmonids (Chinook, Chum, Steelhead, and Coho). Increasing in-stream flows will result in improved habitat for these salmonids.

Provision of a groundwater source would allow the Town of Cathlamet to implement many of these Watershed Plan policies and recommendations.

# Describe the project by task (statement of work):

Work for the proposed project is divided into three distinct tasks:

- Task 1: Research the possibility of converting a portion of the Town's existing surface water rights to groundwater rights. (Complete)
- Task 2: Conduct a hydrogeologic study of existing and potential groundwater aquifers within a practical proximity to the Town's water treatment plant with the intent of estimating available production capacity and ascertaining a suitable location for a test well.
- **Task 3:** Using preliminary data from the hydrogeologic report, drill a test well and perform analysis to determine production yield and water quality. As part of this task, a report will be prepared that assesses the physical and financial feasibility of installing a production well with associated treatment and distribution infrastructure.

# 4. Project Budget: \$105,000 Total budget by project task or by expenditure: Task 1: Water Rights Investigation - \$5,000 Task 2: Hydrogeologic Study - \$10,000 Task 3: Test Well - \$90,000

5.	F	un	dinc	Source	Inform	ation
----	---	----	------	--------	--------	-------

Total project amount expected to be provided by sources other than this program (dollar total and percent of project budget)

\$5,000 (for investigation of water rights transfer) (5%)

Status:

Dates of participation:

Identify sources and type of funding other than through this program grant. Include expected dates of participation. Include as an attachment; letters of commitment, offer letters, application approvals, etc. Source and type of funding: Town of Cathlamet, capital reserves Amount: \$5,000 Status: Available Dates of participation: Complete Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount:

# 6. Instream Flow and other Instream Habitat Benefits

# A. Water Right Information - Attach Water Right documents

(You may skip this section if this application is for Storage Feasibility Study funding)

Water right holder's name (if other than applicant)

Phone no: (360) 795-8032

Fax no: (360) 795-8500

Address

100 Main Street, PO Box 68

Town of Cathlamet

City Cathlamet State WA Zip code 98612

# Complete legal description of the property attached to this water right:

Applicable water rights and legal descriptions are attached to this application.

# Water right number:

The City has four water rights on the Elochoman River with the following certificate numbers and points of withdrawal:

#10260 - 09N/05W-31 River Mile 4.2

#3968B - 09N/05W-31 River Mile 4.2

#3718B - 09N/05W-31 River Mile 4.2

#2929 (original certificate)- New Permit # 4602 (after transfer) – 09N/05W-31 River Mile 4.2

# Parcel number associated with this water right:

#10260 - 09N/05W-31

#3968B - 09N/05W-31

#3718B - 09N/05W-31

#2929(original certificate) - New Permit # 4602 (after transfer) -09N/05W-31

# Do you own the property proposed for this project? If not, please explain:

The Town currently owns the property associated with the point of withdrawal for the Town's water rights. The location of the proposed test well is yet to be determined and will depend on the results of the hydrogeologic report. The proposed hydrogeologic investigation will examine areas in the vicinity of the existing intake that are owned by the Town and other public and private owners.

# If the grant applicant is not the water right holder, please explain the reason:

The grant applicant is the holder of all of the previously mentioned water rights.

# Water source (Stream name).

Elochoman River

B. Water Usage
Has water been put to beneficial use in the past five years?
Yes No I I don't know Describe that use in terms of the specific beneficial use during that period: Waters from the Elochoman River have been used as a municipal water supply serving the Town of Cathlamet and Puget Island. The maximum annual withdrawal over the last five years has been 374 acre-feet. The maximum instantaneous withdrawal over the last 5 years has been 600 gpm. (Please attach any available documents that verify that use during the last five years. Include aerial photographs, power company records, flow meter records, crop type records, NRCS documentation or FSA records)
Has beneficial use of this water ceased for a period of five or more years during any period since 1967? Yes □ No ⊠
Please describe the beneficial use for the water quantified under the water right discussed above. Describe the following: purpose (examples: domestic, irrigation, municipal); system type; if irrigation, describe crop type.
Waters from the Elochoman River have been used as a municipal water supply serving the Town of Cathlamet and Puget Island.
Quantify as nearly as possible current water use:
Instantaneous rate (QI) of use: 1.34 CFS
Annual rate (QA) of use 340 ACRE- FEET
Historic beneficial use quantity of the water right (highest of the last 5 years/irrigation seasons in instantaneous and annual quantities)
<u>1.34</u> CFS <u>374.4</u> ACRE-FEET (Year 2006)
If irrigation, how many acres are irrigated under this water right?
Not Applicable
Are there other water rights associated with this specific water right?
The Town withdraws under all four of it Elochoman River water rights to meet municipal demands.
In order to process this pre-application ecology requires the following information (include for the previous five years; please attach copies of all documents and maps)
♦ Power data (contact local power utility for pump records, etc.)
♦ Historical crop type data (contact local FSA office)
♦ Flow meter records (contact local power utility)
♦ Aerial photos (contact local FSA office)

# C. Estimated Total Water Savings

**Infrastructure projects**: Estimate the water to be conserved through this project. Provide engineering or technical analysis to support this estimate.

The amount of water that could be conserved by this project will be dependent upon the size of production well that can be developed by the Town. It is estimated that a production well could supply between 200 and 700 gpm of water for the Town. Assuming that a production well can be drilled in a deeper aquifer without significant hydraulic continuity to the Elochoman River, withdrawing water from the well instead of from the Town's Elochoman River intake could leave 200 gpm – 700 gpm of additional water in the Elochoman River during critical low flow periods.

# D. Additional Instream Benefits

# Describe other instream benefits envisioned as a result of funding this project:

The primary in-stream benefit associated with this project would be the potential reduction or elimination of surface water withdrawals by the Town of Cathlamet's water treatment plant. By utilizing groundwater sources the Town will effectively increase in-stream flows downstream of their water treatment plant.

Increasing stream flows in the Elochoman River could improve habitat in a waterway known to support four species of Endangered Species Act listed salmonids (Chinook, Chum, Steelhead, and Coho).

7. Resources currently committed to ensure long-term performance of the proposed project (operation and maintenance).
Who is responsible for long-term operation and maintenance of the project?
The Town of Cathlamet will be responsible for the long-term maintenance and operation of any new groundwater source.
Have operation and maintenance costs been identified? Yes No
If yes, please describe:
Operational and maintenance costs will depend on the location and capacity of the proposed well. It is anticipated that operations and maintenance costs will be equal to or less than the Town's current costs for operating and maintaining their surface water intake and treatment plant.
Summarize these costs on an annual basis below:
Groundwater sources typically exhibit lower operational costs per volume of water produced than do surface water sources. Accordingly, development of a groundwater source will likely present an annual cost savings to the Town.
Are measurement devices other than diversion source meters necessary to monitor compliance with the project intent or plan? Yes \( \subseteq \text{No } \infty \)
If yes, please describe:
Does a water measurement device exist on the source <u>and</u> downstream of the proposed project?  yes  no
A flow meter only exists on the existing source and would be installed on the proposed new groundwater source, but a stream gage does not exist downstream of the WTP.
If no, will a water measurement device be installed as part of this project? Yes \( \subseteq \) No \( \subseteq \) If yes, describe location and operating entity:
If yes, provide the river mile: Not Applicable
What is the nearest stream gage downstream of the proposed project? Source name
There are no active stream gages on the Elochoman River. Stream gage No. 14247500 was active from 1941 to 1971 and was located upstream of the Town's water treatment plant, near the confluence of Beaver Creek with the Elochoman River.  River mile: 4.5 (for previously active gauging station No. 14247500 described above)

8. Proponent's Readiness to Proceed	ed	
Describe status of feasibility reports, engineering of these deliverables and describe the project effort t all required documents).		
The Town has completed a Water System Plan that ic completed an investigation of water rights alternative the process will be completing a hydrogeologic evaluation.	s to se	erve the proposed project. The next steps in
Does the project proponent own the land for the p documented access to the right of way or owns an appropriate documentation including title report a	easen	nent to the property proposed (please attach
The location of the proposed test well will depend on proposed hydrogeologic investigation will examine a are owned by the Town and other public and private oppoperty, the Town will need to acquire property or a	reas in owner	the vicinity of the Town's existing intake that s. If the preferred site is not on Town-owned
Design/Engineering Status:		
Pre-planning (pre - permitting)	$\boxtimes$	Status: On-going
Pre-design (design reports) (10%)		Status: Not-started
Schematic design (30%)		Status: Not-started
Design development (75%)		Status: Not-started
Construction documents (95%)		Status: Not-started
Bid documents (ready for bid)		Status: Not-started
Permit Status		
SEPA	$\boxtimes$	Status: Not Started
401		Status:
Dept. of Fish and Wildlife consultation		Status:
Storage and/or Secondary Use Permit		Status:
Other: ()		Status:
Other:()		Status:
Other: ()		Status:

# 9. Signatures (send this sheet electronically and by original signature in surface mail)

I certify that the information above is true and accurate to the best of my knowledge.

I understand that in order to process my application, I am hereby granting staff from the Department of Ecology access to the above site(s) for inspection and monitoring purposes.

If assisted in the preparation of the above application, I understand that all responsibility for the accuracy of the information rests with me.

I also understand that I may rescind this application at any time prior to signing the Agreement with no other obligations or requirements.

(Applicant/ Grant Recipient)

(Date)

(Water Right Holder)

12 / 26 Data)

(Land Owner(s) of Existing Place of Use)

Date)

For More Information Contact:

Dave Burdick

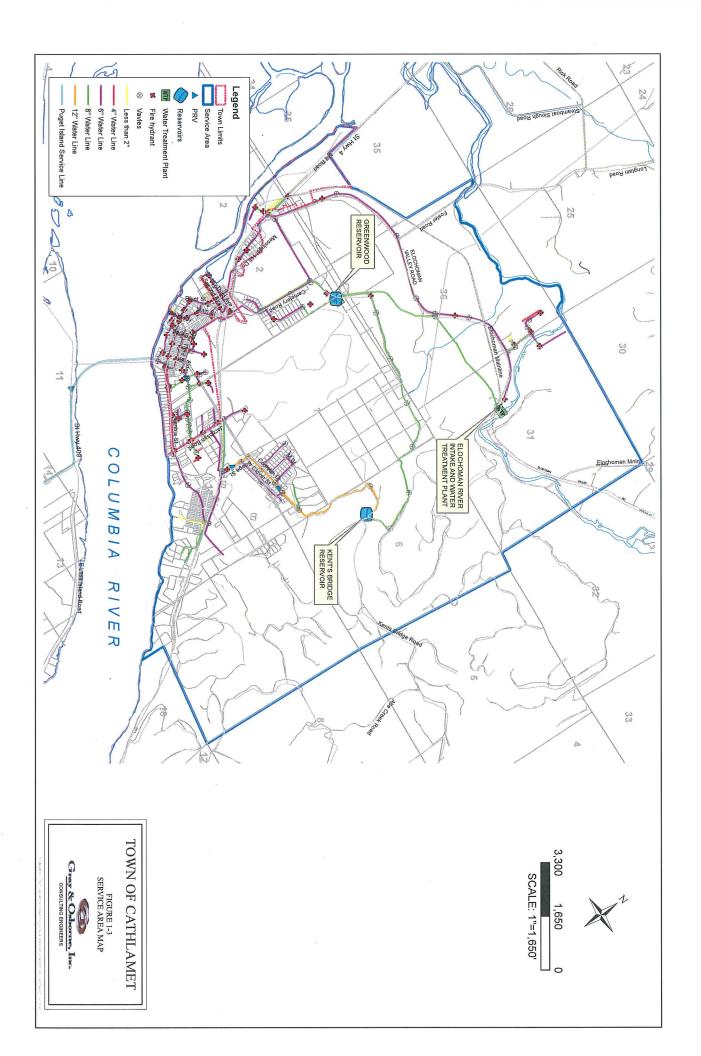
Voice: (360) 407-6094

Email:

dbur461@ecy.wa.gov

Web: http://www.ecy.wa.gov/watershed/Index.html

If you need this document in an alternate format, please call the Water Resources Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



# APPENDIX A VERIFICATION OF BENEFICIAL USE



# WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 1 Updated: 01/03/2008 Printed: 08/12/2008

WFI Printed For: On-Demand Submission Reason: Annual Update

RETURN TO: Southwest Regional Office, PO Box 47823, Olympia, WA, 98504 1. STSTEM ID NO. 2. STSTEM NAME : 3. COUNTY
1.1850, D. CATHLAMET WATER DEPT WAHKIAKUM WAHKIAKUM Comm 6. PRIMARY CONTACT NAME & MAILING ADDRESS EXTE 7. DANER NAME & MAILING ADDRESS DAVID VIK [MANAGER] CATHLAMET, TOWN OF PO BOX 68 DAVID VIK TITLE: OWNER ORG - PRIMAR CATHLAMET, WA 98612 PO BOX 68 CATHLAMET, WA 98612 STREET ADDRESS IF DIFFERENT FROM ABOVE 1985 STREET ADDRESS & DIFFERENT FROM ABOVE ATTN ADDRESS ADDRESS CITY STATE CITY STATE 9: 24 HOLD PRIMARY CONTACT INFORMATION 1985/95 10. OWNER CONTACT INFORMATION Primary Contact Daytime Phone: (360) 795-3203 Owner Daytime Phone: (360) 795-3203 Primary Contact Mobile/Cell Phone: Owner Mobile/Cell Phone: Primary Contact Evening Phone: (360) 795-8032 Owner Evening Phone: (360) 795-8032 E-mail: ccathlamet@centurytel.net Fax: (360) 795-3780 Fax: WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies. 11. SATELUTE MANAGEMENT AGENCY - SNA (chick gary ove) Not applicable (Skip to #12) Owned and Managed SMA NAME: Managed Only Owned Only 22 WATER SYSTEM CHARACTERISTICS (mark ALL that hoppy) ☐ Hospital/Clinic ☐ Agricultural Residential Commercial / Business ☐ Industrial School Day Care ☐ Licensed Residential Facility Temporary Farm Worker ☐Food Service/Food Permit ☐ Lodging Other (church, fire station, etc.): 1,000 or more person event for 2 or more days per year Recreational / RV Park 13. WATER SYSTEM OWNERSHIP (mark only one) 14. STORAGE CAPACITY (gallons) ☐ Investor ☐ Special District Association County City / Town ☐ Private ☐ Federal ☐ State 1.040.000 LIST UTILITY BINAME FOR SOURCE AND WELL TAG ID NUMBE ME WELL OF XYZASK SOURCE SPURCHASED OR MICROEF LIST SELLER'S NAME ELOCHOMAN RIVER 501 NE SW 09N

# WATER FACILITIES INVENTORY (WFI) FORM - Continued

		, ,,,,,				.,	1 (141 -	COII	unuc	u		
1. SYSTEM ID NO. 2. SYSTEM NAME				35-01:125:12, 134	3. COUNTY /AHKIAK	WW. COLOR CONTROL OF CO.				GROUP	4.00	TYPE omm
						2.22	ACTIVE S	FIACE #1	200HUS	EOMY	e DOH U	s on n
Mary and the second second		dili.		gf:0			CONT.	nors ,	ACTIVE CO	NATED NINECTIONS	A 144	OVED 1
25 SINGLE FAMILY RESIDENCES (How many of the following	do you h	rve?) 🕠					0		12.75	6	e Unsp	ecified .
A. Full Time Single Family Residences (Occupied 180 days or more per year)							516	;	-			
B. Part Time Single Family Residences (Occupied less than 180 days per year)							0					
26 MULTEFAMILY RESIDENTIAL BUILDINGS (How many of the A. Apartment Buildings, condos, duploxos, barracks, dorms	e followin	g do you h	ave?)		. <b></b>	<b>1</b> 2: (8)		¥19974				
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are oc	curied more t	hum 180 dayek	10 Tr				10					
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are oc							50					
				are never to their			0	WS 51 (4 - 1 2)				
27. NON-RESIDENTIAL CONNECTIONS (How many of the totto			<b>3</b>		<b>288</b> 90	90.06			<del></del>			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel	mote∜overnigi	ht units)					2		********	2772	11.00	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.							78	9	<b>XXX</b>	1000	<b>300</b>	e de la companya de l
	<b>1</b> 0 % **	28. TOTAL	SERVICE	CONNEC	TIONS 🤾	200		100	<b>64</b> 64	6 <b>% %</b> \$	200	A Maria
729 FULL-TIME RESIDENTIAL POPULATION		i preside	Page 199	\$ - 10 PM	M-2004	70 m 30 m			Section Control	STATE OF THE REAL PROPERTY.	Service of the	5444 × **
A. How many residents are served by this system 180 or more days per ye	ar?				1200						7/-	
30. PART-TIME RESIDENTIAL POPULATION (1) 18 10 10 10 10 10 10 10 10 10 10 10 10 10	TAN	g fee a	NAR?	ARR	E MY	-04	L L	Aug	<b>黎97</b> 次	¢ OCT	± xioV s	å DEC ∲
A. How many part-time residents are present each month?												
B. How many days per month are they present?												
31. TEMPORARYA TRANSIENT USERS 49	JAN	TEB *	MAR	AFR	PAY x	S.M.	SJE .	FAUC	(LEP)	€ ост €	NOV P	DEC 9
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												
AZ NEGULÁR NON RESIDENTIAL USERS MANIMA (1888)	¥,w,s	\$1 <b>9</b> 0	AMA S	( APR )	S MAY S	S.M.	<b>\$.03</b>	L NUGS	432	Coct S	* NOT	pec I
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?	750	750	750	750	750	250	250	250	750	750	750	750
B. How many days per month are they present?	30	30	30	30	30	30	30	30	30	30	30	30
	28-130-152	Silk Control Silk Co				Obs. i micho i baio				EVENT VEL	W-18-002-	20226000000
SSS ROUTINE COLFORM SCHEDULE	<b>X</b>	133 2	3	APR	<b>3</b> 7	an.		5	301 12	00 (4) 442 (4)	NOV.	EDEC <sub>A</sub>
			- 100 TO STORE STO		ST WASHINGTON	1 - 9 - 10 - 10 - 10 - 10 - 10 - 10 - 10			V 10 200 40 8 20			
	<b>(8.4</b> 100) (3.20-40)	enter the second second	aga <b>h</b> agaston a com	podľateli i oceania v men	STARON STORES	description of the same and the	htts://www.commons.com	a se sing strong resissance	and the control of th	***************************************		
25. Reason for Submitting WFI:					42	111			100			
Update - Change Update - No Change U	nactivate	□R	e-Activat	e 🗌 N	ame Cha	nge [	New Sy	/stem	Other			
36. I certify that the information stated on this WFI form	is correct	to the be	st of my	knowled	ge.							
SIGNATURE:					DAT	E:						
PRINT NAME:	-									***************************************		
17.100.17.000.		·			TITL	Ľ						

since this data is based on water production it includes water used for non-residential purposes, water leakage, and other unaccounted-for water.

Water production remained steady between 2002 and 2005. A significant increase in production was noted in year 2006. This was the first full season of irrigation watering for the new recreational ball fields and high school football field. While watering will continue for these recreational facilities, the frequency and quantity of irrigation activities will be reduced once the turf becomes established. For this reason, the average annual per capita water production utilizes years 2002 through 2005, which is more likely to be representative of the Town's production. Table 2-3 shows the calculated average daily per-capita water production for 2002 through 2006. Year 2006 is shown but was not utilized in calculating the per capita production. The average per-capita water production is 134 gallons per capita per day (gpcd). For purposes of planning future water demands, an average day per-capita water production of 134 gallons per capita per day (gpcd) will be used.

TABLE 2-3

Average Annual Per Capita Water Production

		Puget			Per Capita
	Total Production:	Asland Intertie	≥Cathlamet; Water⊅	- Population	Water Production,
≥ <sub>3</sub> Year <sub>20</sub> 2*	(gallons)(!)	- Meter -		(estimated)	gpcd
2002	102,168,000	34,979,660	67,188,340	1,295	142
2003	98,691,000	36,668,013	62,022,987	1,288	132
2004	99,526,000	38,069,862	61,456,138	1,328	127
2005	99,893,000	33,084,096	66,808,904	1,358	135
2006 <sup>(2)</sup>	121,993,000	40,872,216	81,120,768	1,390	160
2007	110,735,000	38,633,839	72,368,161	1,429	139
		Average			134

<sup>(1)</sup> This data is based on water production and includes water used for non-residential purposes, water leakage, and other unaccounted-for water.

<sup>(2)</sup> Year 2006 Total Production was not utilized in the Per Capital Water Production since it was the first year in establishing field turf at the Town's ball fields and high school football field. Irrigation water use is expected to be less in subsequent years once the turf has become established.

# APPENDIX B WATER RIGHTS

# Water Right Certificate #10260

**Elochoman River** 

STATE OF WASHINGTON, COUNTY OF....

# CERTIFICATE OF SURFACE WATER RIGHT

This is to certify that TO	of the Department of Water Resources thereunder.
of Cothleast	
to the satisfaction of the p	- MARALAGE PE
一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一	- wantington of
Full Of Citions	
wp Y	
Permie	and subject to provide
the the plant and	Further of Water b
y commind by at	tance with the 1
at D	Washington - Y
unite of the right !	of the state of th
amount of water under the right has	g confirmed is released 4, 1941
s cite will il used and the	John Durmen !
PAI BUDDI	Conclusionally during
A description of the lands under splace where such trains.	uch right
place where such water is put to benefic  Area served by the Town of Cathlen	uch right to which the water right is appurtenant, and the
•	ŧ ·

The right : the use of the water aforesaid hereby confirmed is restricted to the lands or place of use herein described, except as provided in Sections 6 and 7. Chapter 122, Laws of 1929. This certificate of surface water right is specifically subject to relinquishment for nonuse of water as provided in Section 18. Chapter 233. Laws of 1967.

WITNESS the seal and signature of the Assistant Director. Division of Water Management, Department of Water Resources affixed this 22md day of

Assistant Director
Division of Water Mesagement
Department of Water Researces

# Water Right Certificate #3968B

**Elochoman River** 

PCU, POO, Spill Cortil DEPARTMENT OF SCOLOR P ypose, Period CERTIFICATE OF WATER RIGHT [ CHALL STATE WITH MONTY DATE 3968-B 5328 0. March 8, 1946 own of Cathlamet Post Office Box 68 Cathlamet Washington 98612-0068
This is to certify that the herein named applicant has made proof to the satisfaction of the Department of Ecology of a right to a of the public waters of the State of Washington as herein defined, and under and specifically subject to the provisions contained in the Permit issued by the Department of Ecology, and that said right to the use of said waters has been perfected in accordance with the lews of the State of Washington, and is hereby confirmed by the Department of Ecology and entered of record as shown, but is limited to an amount actually beneficially used. PUBLIC WATERS TO BE APPROPRIATED io Aci Elochoman River THEUTARY OF IF BUTFACE WATER Columbia River NUM ACHEPEET PER YEAR MADRIUM GALLONG PER NOMUTE MAINUN CURIC PEET PER SECOND (None transferred) 0.2 cfs QUANTITY, TYPE OF USE, PERIOD OF USE Year-round, as needed (No annual quantity transferred; increase of diversion rate only). Municipal supply LOCATION OF DIVERSION/WITHDRAWAL THE POST OF THE PARTY OF THE PA 520 feet south and 1185 feet west of the center of Section 31. W.RIA LOCATED WITHIN BANKLEST LISEA: SUBDIMBION Wahkiakum 25 Gustavius Kreb D.L.C. No. 37 31 DEVAMED PROPERTY BLOCK

Area served by the Town of Cathlamet.

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

# Water Right Certificate #3718B

**Elochoman River** 



or of Cathlemat	und Water and appropriate Annual State of Water	Cathlame of her higher at her by, and shot is confirmed by	the production of the producti	ter, and the	Washi packon of Ir and specific said waters cology and i	BITATES  BIT	ent of Ecologics to the provi	gar coon 8612-0068 gr ay a right to the listone contained to contained with the li
Ground In 1946  Was of Cathlarnet  Was of Cathlarnet  Was of Cathlarnet  Was of Cathlarnet  Common Box 68.  Was of Cathlarnet  Was of Cathlarnet  Common Box 68.  Was of Cathlarnet  Common River  Com	7357	Cathlamo plicant has infon as has or, and shat is confirmed by	nade:pro rein defin said right y she Dep	5522 oof to the sale and, and under to the use of partment of the	Washi Facilor of 1 and specify said waters cology and i	gram ngton he Departm ically per per content of re-	3718-B  9 ant of Ecolor	gar coon 8612-0068 gr ay a right to the listone contained to contained with the li
or of Cathlemat	7357	Cathlamo plicant has infon as has or, and shat is confirmed by	nade:pro rein defin said right y she Dep	5522 oof to the sale and, and under to the use of partment of the	Washi Facilor of 1 and specify said waters cology and i	gram ngton he Departm ically per per content of re-	3718-B  9 ant of Ecolor	gar coon 8612-0068 gr ay a right to the listone contained to contained with the li
Gent 1, 1946  Wa of Cathlemet  Comoo Bor 68,  Society Jan 80,  Comoo Bor 68,  Society Jan 80,  Comoo Bor 68,  Society Jan 80,  Comoo Bor 68,	7357	Cathlamo plicant has infon as has or, and shat is confirmed by	nade:pro rein defin said right y she Dep	5522 oof to the sale and, and under to the use of partment of the	Washi specific of the said specific said waters cology and the said specific said spec	gram ngton he Departm ically per per content of re-	3718-B  9 ant of Ecolor	gar coon 8612-0068 gr ay a right to the listone contained to contained with the li
Gent 1, 1946  Wa of Cathlemet  Comoo Bor 68,  Society Jan 80,  Comoo Bor 68,  Society Jan 80,  Comoo Bor 68,  Society Jan 80,  Comoo Bor 68,	7357	Cathlamo plicant has infon as has or, and shat is confirmed by	nade:pro rein defin said right y she Dep	5522 oof to the sale and, and under to the use of partment of the	Washi specific of the said specific said waters cology and the said specific said spec	gram ngloti ha Departmically subject has been po entered of re	9 and of Ecolo t to the provi	8612-0068 by of a right to the bions contained in container with the l
Of Cathlered  Office Box 68  A Composition of the C	State of Washi	Cathlamo Plicant han ingion as has y, and shot is confirmed by	nade:pro rein defin said right y she Dep	t to the use of E partment of E	daction of it and specificated waters cology and	ngton he Departmi ically subject has been po entered of re	ent of Ecologics to the provi	8612-0068 by of a right to the bions contained in container with the l
Composition of the Composition o	State of Washi	Cathlamo plicant has a rigion as has y, and that a confirmed by	nade:pro rein defin said right y she Dep	t to the use of E partment of E	daction of it and specificated waters cology and	ngton he Departmi ically subject has been po entered of re	ent of Ecologics to the provi	8612-0068 by of a right to the bions contained in container with the l
Chosena River	State of Washi	pilicant has in rigion as has y, and that is confirmed by	made pro rein defin said right y she Dep	t to the use of E partment of E	daction of it and specificated waters cology and	he Departm ically subject has been po entered of re	ent of Ecologics to the provi	gy of a right to the bione contained in container with the li
Chocana River	State of Washin	rigion as har p, and that s confirmed by	rein acpri said right y she Dep	t to the use of E partment of E	said waters cology and	has been po entered of re	-Correct for my	contance with the l
Choman River		p, and shad s confirmed by	said right y she Dep	t to the use of E partment of E	cology and	entered of re		
CE CENTRAL RIVER  MANY OF PROPRIES  MANY OF PROPRIES  MANY OF PROPRIES  MANY OF MANY O	i, and is hereby i	PUBLIC \	WATER	TO BE AP	PROPRIAT	EO .		
CE CENTRAL RIVER  MANY OF PROPRIES  MANY OF PROPRIES  MANY OF PROPRIES  MANY OF MANY O		PUBLIC	WATER	TO BE AP	PROPRIAT	EO		-
Choman River  AND OF FRANCE WARM  LIMITED RIVET FOR SECOND  CES  SEET THE OF USE, PRINCE OF								-
AMP OF STANFACE WATERS EAST DISC PRET FOR SECOND CDS SEET, THE OF USE, PRINCE OF U			<del></del>					
REMODER REVER SECOND  CES  SECURITIES OF LIKE PERSON OF LIKE								
CES						1	EPEET POR VEAR	
MENT THRE OF LINE PRINCE OF C		MUSHING GA	LLONE PER N	MINUTE .		(None to	ransferred	)
man, the or too, to the or	(DE	_L				1`		
rease of diversion	transferred;	Municip	pal supp	ply		Year-ro	und, as no	eded
CHARLE LACKSON OF BRIDE	31 - BIT (3400A)			NYERSION/		'AL		
0 feet south and 11	185 feet west	of the ce	nter of	Section 31	•			
			SECTION	TOWNS ST	. NOE E	OR W) W.M.	WALA	COUNTY
estavius Kreb D.L.	C. No. 37		31	9	SW		25	Wahkiakum
		REÇ		PLATTED P				
	Brook		C	OF PARE NAME OF I	LAT OR ADDITION	1	•	
	LEGAL DESCR	WOTON A	E 0000	EDTY AU W	HCH WAT	FR IS TO	E USED	
	LEVAL DESCR	A IIVII VI		ENTLY !!	UDCLUCI	MIN IX	- X.X.	
rea served by the T	Fown of Cath	ılı net.						

The state of the s

# Water Right Certificate #2929 Water Right Permit #4602

**Elochoman River** 

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
AMENDED
PERMIT
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

. 🛭	Surface Wate		accordance with the provisions thereto, and the rules and	ons of Chapter 117, Laws of regulations of the Departme	Washington for 1917, and of Ecology.)		
	Ground Wate	[ (lawed in	sccordance with the aroutri	ons of Chapter 263, Laws of regulations of the Departme	Westing Council		
PRIORITYDATE		APPLICATION	NUMBER	PERMIT NUMBE	R	CERTIFICATE NUME	1ER
October 6, 1945		6705		4602	•	2929	
NAME Town of Cathlamet							
ADDRESS (STREET)			(CITY)		(STATE)		IP CODE)
PO Box 153			Cathlamet		Washington	ò	8612
The applicant is pursuant to State of Washington, subject	to existing rights a	na to the tunii	alions and provision	s sel herein.			
		ŀ	UBLIC WATER	S TO BE APPRO	PRIATED		
SOURCE Elochoman River							
TRIBUTARY OF (IF SURFACE W Columbia River	•						
MAXIMUM CUBIC FEET PER SE	COND		MAXIMUM GALLONS	PER MINUTE	MAXIMUM ACI	RE FEET PER YEAR	
0.50					61.5		
61.5 Acre-feet per year		M	funicipal supply		Year-rou	ınd, as needed	
		LOC	CATION OF DIV	ERSION/WITHD	RAWAL	· · · · · · · · · · · · · · · · · · ·	
500 feet South and 10			er of Section 31.				
			•				
LOCATED WITHIN (SMALLEST	LEGAL SUBDIVISION)		SECTION	TOWNSHIP N.	RANGE, (E. OR W.) W.M.	W.K.I.A	COUNTY
NEW SWW			31	9	5W	25	Wahkiakum
			RECORDED PL.	ATTED PROPER			
LOT	BLOCK			OF (GIVE NAME OF F	LAT OR ADDITION)		
					······		
	····						
	LEGAL D	ESCRIPTI	ON OF PROPER	TY ON WHICH V	VATER IS TO BE US	ED	

Lands in Wahkiakum County served by the Town of Cathlamet Municipal Water System.

0"X90' perforated pipe intake filtration trench, wet well, pumps sized to handle 821 gpm.	
DENIES OF STATE OF ST	
DEVELOPMENT SCHEDULE	
BEGIN PROJECT BY THIS DATE: COMPLETE PROJECT BY THIS DATE: WATER PUT TO FULL USE BY THIS DATE:	
Started September 1, 2003 September 1, 2021	
3003	

An approved metering device shall be installed and maintained in accordance with RCW 90.03.360, 90.44.450 and WAC 508-64-020 through -040, and WAC 508-12-030. Meter readings shall be recorded at least monthly.

The permittee is advised that notice of <u>Proof of Appropriation</u> of water (under which the final certificate of water right is issued) should not be filed until the permanent distribution system has been constructed <u>and</u> that quantity of water allocated by the permit to the extent water is required, has been put to full beneficial use.

Issuance of this water right is subject to the implementation of the minimum requirements established in the Conservation Planning Requirements, Guideline and Requirements for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology, and Conservation Programs, July 1994, and as revised.

Under RCW 90.03.005 and 90.54.020(6), conservation and improved water use efficiency must be emphasized in the management of the State's water resources, and must be considered as a potential new source of water. Accordingly, as part of the terms of this water right, the applicant shall prepare and implement a water conservation plan approved by Department of Health. The standards for such a plan may be obtained from either the Department of Health or the Department of Ecology.

A certificate of water right will not be issued until a final investigation is made.

This permit shall be subject to cancellation should the permittee fail to comply with the above development schedule and/or to give notice to the Department of Ecology on forms provided by that Department documenting such compliance.

Given under my hand and the seal of this office at Olympia, Washington,

this 28th day of December 2001.

Department of Ecology

ENGINEERING DATA

\*\*\*\*\*

J. Mike Harris, Section Supervisor

XI. 400

# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY APPLICATION FOR CHANGE REPORT OF EXAMINATION TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

. 🖾	Surface Water	(Issued in accord- amendments ther	ance with the provision eto, and the rules and n	s of Chapter 117, Laws of W egulations of the Department	eshington for of Ecology.)	1917, and		
	Ground Water	(Issued in accord amondments ther	ence with the provision eto, and the rules and n	s of Chapter 263, Laws of W cyulations of the Department	ushington for af Ecology.)	1945, and		
PRIORITY DATE	APP	LICATION NUMB	ER	PERMIT NUMBER			CERTIFICATE NUMB	ER
October 6, 1945	67	05		4602			2929	
NAME Town of Cathlamet								
ADDRESS (STREET)		(CIT			(STATE)			P CODE)
PO Box 153		Cat	hlamet		Washin	gton	9	8612
		DIID	LICWATERS	TO BE APPROP	PLATE			
		PUB	DIC WATERS	TO BE AFFROR	KIATEL	<u></u>		
SOURCE Elochoman River								
TRIBUTARY OF (IF SURFACE V	'ATEAS)							
Columbia River				Ch LOTTE		1/1/20 001/1/2	NE FEET PER YEAR	
MAXIMUM CUBIC FEET PER SECOND 0.50			MAXIMUM GALLONS PER MINUTE			61.5		
QUANTITY, TYPE OF USE, PER 61.5 Acre-feet per ye	OD OF USE	Mun	Municipal supply			Year-round, as needed		
			TION OF DIVI	ERSION/WITHDE	RAWAL			
APPROXIMATE LOCATION OF 500 feet South and 10	00 feet West from	the center o	f Section 31.		•		•	
LOCATED WITHIN (SMALLEST	LEGAL SUBDIVISION)		SECTION	TOWNSHIP H.		, (E. OR W.) W.M.		Wahkiakum
NEW SWW			31	9	J 5W		25	Wankjakum
		RF	CORDED PL	ATTED PROPER	TY			
LOT	BLOCK		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	OF (GIVE NAME OF P		DITION)		
				1				
	LEGAL DE	SCRIPTION	OF PROPER	TY ON WHICH V	VATER I	S TO BE U	SED	
	DOGIN DO							
Lands in Wahkiakum	County served by t	he Town of	Cathlamet Mu	micipal Water Sys	stem.			

10"X90' perforated nine intake filtration	on trench, wet well, pumps sized to handle	821 gpm
	DEVELOPMENT SCHE	
BEGIN PROJECT BY THIS DATE: Started	COMPLETE PROJECT BY THIS DATE: - September 1, 2003	September 1, 2021
Started	September 1, 2003	September 1, 2021

# BACKGROUND:

On August 3, 1999, William J. Faubion, as attorney for the town of Cathlamet, filed an Application for Change/Transfer to change the purpose of use, the place of use, and the point of diversion associated with Certificate of Water Right 2929. This surface water right, with a priority date October 6, 1945, was originally issued for diversion of 0.50 cubic feet per second (cfs) from the Elochoman (Elokomin) River, a tributary of the Columbia River, for irrigation of 50 acres. No annual quantity or season of use was prescribed in the certificate. The purpose of this Application for Change/Transfer is to increase peaking supply in order to meet current and future peak demands and improve system reliability and efficiency.

Public Notice appeared in "The Wahkiakum County Eagle" newspaper of Cathlamet, Washington on November 4 and 11, 1999. No letters of protest were received during the 30-day protest period.

Under RCW 90.03.380, the Department of Ecology is permitted to change an existing surface water certificate. The Department may issue such a change after publication of notice of the application and findings as prescribed in the case of an original application. Pursuant to RCW 90.03.290, the findings required by an original permit application are as follows: (1) water is available for appropriation/change; (2) the appropriation/change is for a beneficial use; (3) the appropriation/change will not impair existing water rights; and (4) the appropriation/change will not be detrimental to the public interest.

In 1997 the Washington State Supreme Court issued its decision in Okanogan Wilderness League v. Town of Twisp, 133 Wn.2d 769, 947 P.2d 732 (1997). The Court held that water must be put to beneficial use under a surface water right before it can be subject to change pursuant to RCW 90.03.380. In reviewing an application, Ecology must tentatively determine the quantity of water subject to change based on actual historical use.

Based on the provisions of Chapter 90.03 RCW, and my investigation, I recommend approval of this request and issuance of an amended permit for 0.5 cfs, 61.5 acre-feet per year (afy), for municipal water supply, year round.

# INVESTIGATION:

In consideration of this requested change, I conducted a field exam on March 24, 2000. I also reviewed the information submitted with the application; the Town Of Cathlamet Regional Water System Plan, March, 2000; Elochoman River Subbasin Salmon And Steelhead Production Plan, September 1990; the Washington State Department of Fish and Wildlife 1992 Washington State Salmon And Steelhead Stock Inventory and 2000 Washington State Salmonid Stock Inventory, State of Washington Irrigation Guide; recorded water rights and other pertinent Ecology records. The following narrative is the result of this investigation:

# Evaluation of the Water Right

Certificate of Water Right 2929 (priority date October 6, 1945), was issued for diversion of 0.50 cfs (224.4 gpm) from the Elochoman River, tributary of the Columbia River, for irrigation of 50 acres. The point of diversion is located in the NW ½ of the NE ½, Section 36, Township 9 N., Range 6 W. W.M. The place of use is within the NE ½ Section 36 and the SE ½ Section 25, Township 9 N., Range 6 W. W.M.

The property has been in farm use since the water right issued. Current owners, Dale and Margaret Strueby, have farmed the property and irrigated up to 50 acres of pasture grass since 1967. All irrigation has been done during the summer months, May through September. Although there have been a few years recently that they did not irrigate because of health reasons, there are no indications of any five-year periods of non-use. During the field exam, I observed the power pole and power outlet and some irrigation pipe near the point of diversion. A 15 HP pump has been used for this diversion. A 15 HP pump at 70 percent efficiency is capable of pumping about 600 gpm against a 30-foot head. It is reasonable to conclude that the maximum instantaneous quantity of 0.50 cfs has been put to beneficial use

Certificate of Water Right 2929 does not identify an allocated annual quantity and there are no pumping records available to determine a reasonable perfected annual quantity. The State of Washington Irrigation Guide was developed by the United States Department of Agriculture, the Soil Conservation District, and the Washington State Cooperative Extension Service to calculate irrigation requirements for various crops at different sites around the state. Using the recommended value as reported for nearby Longview Washington, pasture grass requires on average, 14.72 inches of additional water per acre during the growing season in this area. This equates to 61.5 afy for irrigation of 50 acres, a reasonable value to assign as a perfected annual quantity.

# Proposed Change to Water Right

The current point of diversion is at river mile (RM) 3; the proposed point of diversion is at RM 4.2. The current place of use is 50 acres of the Strueby farm; the proposed place of use is the Town of Cathlamet service area. The current purpose of use is irrigation; the proposed purpose of use is municipal public supply. The time of year this water right has been exercised is during the summer months; the proposed period of use will be year round.

## Cathlamet Water Rights Summary

Presently the Town of Cathlamet holds the following water right certificates:

Certificate No.	Priofity Date	Source 444	Lideation (*)	Amount (%)
10260C	02/04/41	Elochoman River	09N/05W-31	0.83 cfs*
3718-B	08/01/46	Elochoman River	09N/05W-31	0.3 cfs*
3968-B	03/08/46	Elochoman River	09N/05W-31	0.2 cfs*
782C	03/27/28	Abe Creek	08N/06W-02&11	0.50 cfs
40C	06/25/22	. Cougar Creek	08N/05W-07	0.60 cfs

<sup>\*</sup>Total quantities diverted May I through September 30 each year under these certificates shall not exceed 247.3 acre-feet. Total annual quantities diverted under these certificates shall not exceed 572.3 acre-feet per year.

In a 1994 water right investigation and subsequent Report of Exam, Ecology staff made a tentative determination that the annual quantity associated with Certificate No. 10260C totaled 572.3 afy. This figure was arrived at based on an instantaneous diversion of 0.83 cfs. Allowing for 5% downtime associated with filter plant operation, the town could pump about 510,000 gallons per day on average. The water system plan projects an annual demand of 463 afy in the year 2020 and an average daily demand of 413,500 gallons. It appears that no additional annual quantity is needed at this time.

The total instantaneous diversion authorized under these rights is 2.43 cfs. However, Certificates No. 10260C, No. 3718-B and No. 3968-B, issued for a total 1.33 cfs (597 gpm) from the Elochoman River, are the only source currently being used by the Town of Cathlamet. Abe Creek and Cougar Creek are not tributary to the Elochoman River and water is not being diverted from either source for use by the city. Although water rights were issued to Cathlamet allowing withdrawal from Cougar Creek and Abe Creek, it was reported that Cathlamet has not used either diversion since the Elochoman River withdrawal was permitted. Because of water quality concerns, lack of data, and the expense involved, Cathlamet is not pursuing municipal withdrawals from either source.

The Elochoman River supplies 100% of Cathlamet's water. The water intake is located approximately two miles east of SR4 along SR407. The raw water intake filtration trench consists of 90 feet of 10-inch perforated pipe extending the width of the river. The pipe is installed two 4 feet below the riverbed and backfilled with screened gravel. The pipe delivers raw water through gravity to an intake wet well in the adjacent water treatment plant building. Two, 7.5 HP raw water pumps then deliver water for treatment. Each pump is capable of 300 gpm or a combined rate of 600 gpm, the current total instantaneous diversion rate.

The water system has experienced operational problems with this diversion in the past. The perforated intake line becomes clogged and must be flushed regularly. During times of high turbidity in the river, it becomes necessary to flush the intake every few hours, limiting the system's ability to meet demands. An increase in the instantaneous quantity will allow the water system to better meet supply demands and operate more efficiently.

This Application for Change/Transfer would increase the town's instantaneous quantity to 1.83 cfs (821 gpm). The new rate combined with equalizing storage available in the two reservoirs will allow the water system to meet peak hourly and daily demands. The water system plan calculates the current peak hour demand at 757.6 gpm and projects peak hour demand of 1002.6 gpm by the year 2020. Future planned improvements include larger pumps to handle the increased rate.

# Effect on Other Water Rights

A search of Ecology water rights records shows no water rights or water right claims in the affected river reach. Moving this point of diversion 1.2 miles upstream will not adversely affect any other water rights.

# Effect on Surface Water and Fisheries

The headwaters of the Elochoman River lie in the Willapa Hills of southwest Lewis County and northeast Cowlitz County. The river flows in a southwesterly direction into Wahkiakum County, joining the Columbia River just downstream from Cathlamet. Climate in the basin is influenced by marine air from the Pacific, with wet mild winters and cool, relatively dry summers. Annual rainfall averages 80-100 inches with most of it falling between October and March.

Streamflow originates almost entirely from rainfall and averages 375 cfs with typically wide extremes between the wet winters and the dry summers. Well-drained soils in the hilly headwaters and poorly drained soils in the lower floodplain, contribute to the low water storage potential of the system. This, combined with the lack of snowpack causes large fluctuations in the annual streamflow, often with extremely low base-flows during summer and fall months.

The lower portion of the Elochoman River is tidally influenced to about RM 4.2 at the water plant intake, elevation approximately 40 feet above mean sea level (mst). This correlates with the extent of tidal influence on the lower Columbia River just below Bonneville Dam, elevation approximately 40 feet above msl. The reach of the river affected by this proposed change is within this lower, tidally influenced portion.

The river supports a number of salmonid species through both natural and hatchery production. Two hatcheries, Beaver Creek trout hatchery at RM 6 and the Elochoman River salmon hatchery at RM 9, have been in operation since the 1950's, although the Beaver Creek hatchery closed in 1999 due to funding constraints, with part of the operation shifting upstream to the salmon hatchery. The salmon hatchery raises fall chinook and coho, and the trout hatchery raised winter steelhead and coastal cuthroat. The summer/fall low-flows and loss of habitat from past land practices, namely logging and agriculture, limit natural production in the system.

Fall chinook salmon are the species most impacted by low base-flows. They enter the river in late summer and spawn from late September to mid November. Because flows are generally too low for passage when fish first enter the river, a weir at the Foster Road Bridge (RM 2.2) is used to collect fish which are then trucked to the hatchery. When the hatchery has reached its egg-take goal, remaining fish are allowed to proceed upstream and spawn naturally when flows are sufficient. The fall chinook run was rated as healthy in the 1992 Washington State Department of Fish and Wildlife Salmon and Steelhead Stock Inventory report.

Other species are not as impacted by low-flow conditions because of the times of year spawning occurs. The majority of coho salmon enter the river starting in November and spawn through December. Chum salmon are native to the river and spawn in the lower reaches enter the river starting in November and spawn through December. Chum salmon are native to the river and spawn in the lower reaches

# Report Continued

stem and tributaries. Coastal cuthroat consisting—anadromous and resident forms are distribute—aroughout the system. The anadromous fish enter the river beginning in July and continue through the fall with spawning activity occurring from January through April.

The original point of diversion at RM 3 is upstream of the Foster Road Bridge weir at RM 2.2. Therefore, moving the point of diversion approximately 1.2 miles upstream to the extent of the tidal range at the Water Plant will have no additional effect on low-flows at the weir. There should be no additional adverse impact to aquatic habitat. In addition, there is potential benefit to juvenile salmon from elimination of the irrigation pump intake and transfer of the diversion to the screened and covered Water Plant intake. Another expected benefit will be the change from seasonal to year round use. There will be less impact to the river during the critical dry season.

# Conservation Program

The water system plan states unaccounted for water at 15% and recommends a leak detection program. Evergreen Rural Water Association can possibly assist with leak detection. In addition, the State Department of Health is obtaining leak detection equipment to assist small water systems.

The further development of the conservation program is also recommended. The program could include a public education/outreach element with conservation information sent with customer billing. The State Department of Health provides free conservation brochures that can be obtained by contacting State Department of Health staff.

RCW 90.54.030 directs the Department of Ecology to be informed with regard to all phases of water resources of the state, in order to make sound resource management decisions. This permit will include detailed provisions for the collection and submittal of water production data.

# **CONCLUSION AND FINDINGS:**

- The original application for this permit found that water was available for the appropriation. This finding is not affected by this
  change application.
- 2. The water will be put to beneficial use for municipal water supply.
- 3. The change is not expected to impair any existing water rights, whether junior or senior. If an impairment of junior or senior water rights should occur, such impairment would be grounds for curtailment or cessation of any diversion resulting from the change which causes such impairment, or provide such mitigation as to remedy the situation.
- The change will not be detrimental to the public interest. The change is not expected to cause any detrimental environmental effects
  on the natural environment. The change is also found to promote the public interest by improving reliability and efficiency for this
  public water system.

# RECOMMENDATION:

Future needs, as projected by the most recent coordinated water system plan, indicate that the town will not have an immediate need for idditional annual quantity. However, the perfected instantaneous and annual quantities represented by this water right certificate exist as primary water rights. Therefore, I recommend rescission of the surface water certificate and issuance of an amended permit with a 20-rear development schedule. This should allow the town of Cathlamet ample time to perfect the annual quantity portion of this water right and flexibility in meeting future needs.

n accordance with Chapter 90.03 RCW, I find that water is available from the source in question, that this change will not impair senior ights or be detrimental to the public's welfare.

recommend the issuance of an amended permit to divert 0.50 cfs instantaneous quantity, 61.5 afy annual quantity from the Elochoman River for municipal supply, year round, subject to the following provisions.

# PROVISIONS:

An approved metering device shall be installed and maintained in accordance with RCW 90.03,360, 90.44,450 and WAC 508-64-020 hrough -040, and WAC 508-12-030. Meter readings shall be recorded at least monthly.

The <u>applicant</u> is advised that notice of <u>Proof of Appropriation</u> of water (under which the final certificate of water right is issued) should tot be filed until the permanent distribution system has been constructed <u>and</u> that quantity of water allocated by the permit to the extent vater is required, has been put to full beneficial use.

ssuance of this water right is subject to the implementation of the minimum requirements established in the Conservation Planning Lequirements, Guideline and Requirements for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology, and Conservation Programs, July 1994, and as revised.

Inder RCW 90.03.005 and 90.54.020(6), conservation and improved water use efficiency must be emphasized in the management of the itate's water resources, and must be considered as a potential new source of water. Accordingly, as part of the terms of this water right, ae applicant shall prepare and implement a water conservation plan approved by Department of Health. The standards for such a plan 12y be obtained from either the Department of Health or the Department of Ecology.

certificate of water right will not be issued until a final investigation is made.

EPORTED BY: Tal Date: November 1, 2001

The statutory amended permit fee for this application is \$20.00.

# FINDINGS OF FACT AND DECISION

Upon reviewing the above report, I find all facts, relevant and material to the subject change application, have been thoroughly investigated. Furthermore, I find water is available for appropriation and the appropriation as recommended is a beneficial use and will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER an Amended Permit be issued under Surface Water Change Application Number 2929, subject to existing rights and indicated provisions, to allow appropriation of public surface water for the amount and uses specified in the foregoing report.

Signed at Olympia, Washington, this 1st day of November, 200

. Mike Harris

Water Resources Supervisor Southwest Regional Office CONTINUESTE RECORD NO. 6 PAGE NO. 2929

State or Washington, County of Wahkiekun

# CERTIFICATE OF WATER RIGHT

This	is to certify	y, that	RATHOND WIEST		
	Cathl	amet	State of	shington	, has made
of to t	lie satisfa	ction of the S	tate Supervisor of Hydraulics of W	Vaslidagton, of a ri	ght to the use of
water	e of	Elokomin	River , a cributary of	Columbia R	iver
poln	t or polate	of diversion	within the Thompson Dray D	.L.C.	
36	Trop.	9 H. Ran	ge 6 W., W. H., for the purpose	s of	
			irrigation		
er_ A	ppropri	ation Per	mit No. 4602 Issued by the S	tata Suparvisor of	Hydraulics, and
t sald	right to th	e use of said t	vators has been perfected in accord	ance with the law	s of Washington,
ic ha	- เก็บ เดอเป็น	rmed by the S	tate Supervisor of Hydraulics of W	astrington and ent	ered of record in
นานส	6 6	t Pege 2929	on the 6th day of Jan	unary	, 19 48; that
right	hereby co	nfirmed dates	from October 6, 1945	; that the an	nount of water to
շև բա	h right is	entitled and	hereby confirmed, for the purposes	aforesaid, is Umli	ted to an amount
aller b	enoficialls	used for said	purposes, and shall not exceed	ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ	
			.50 of a cubic foot per	second,	<u></u>
de	cription (	of the lands u	nder such right to which the wate	r hereby confirme	l is appurtenant,
			s put to beneficial use, is as follows		
*****	FLACE OF	COLUMN TO THE STATE OF THE STAT		FOR BERT	
ction	Township	Range	legal evadivision	No. Acres Departed in Permit	No Vesse vessely
5	9 N.	6 W.W.M.	That portion of No of Ni	t 50	50
		6 W.W.M.	and That portion of SEL of S	i .	
<u> </u>	9 Na	D Wallacia	located within the bound	1	
			of Thompson Dray Donatio	1	
			Land Claim.	· · · · · · · · · · · · · · · · · · ·	•
					<u> </u>
E)	- 			FOR PO	WER .
LOCATION OF POWER PLANT			LEGAL SUBDIVISION	R. P. Described in Permit	H.P. Actually Developed
##B	Township	Rance		· ·	
	ļ				
	<u> </u>				
-			t not it the property	FOR OTHE	R V523
ion	Township	Rango	LEGAL SUBDIVISION	701.000	
	L				
20	right to 11	a use of the	vater aforesold hereby confirmed is	restricted to the l	ands or place of
ret	n describe	d, except as p	rovided in Sections 6 and 1, Chapto	r 122, Laws of 1929	).
y i T	NESS the	scal and sion	ature of the State Supervisor of H	ydraulies aftrod th	ils Sth Hay
	Janus		10 48	The same of the sa	
				ecces St	1 ken
			The state of	2	e of Hadraullel